



PATENT  
Customer Number 22,852  
Attorney Docket No. 5725.0489-00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Gérard LANG, et al.

Application No.: 09/424,116

Filed: January 6, 2000

For: OXIDATION DYEING  
COMPOSITION FOR KERATINOUS  
FIBRES CONTAINING A 3-  
AMINOPYRIDINE AZO DERIVATIVE  
AND DYEING METHOD USING  
SAID COMPOSITION

Group Art Unit: 1751

Examiner: M. EINSMANN

#10  
8-6-01

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

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**RESPONSE**

The final Office Action dated May 8, 2001, has been received and its contents carefully considered. The rejections contained therein are addressed below.

**I. Status of the Claims**

Claims 26 - 60 are pending in this application. No claims have been amended.

**II. Rejections under 35 U.S.C. §103**

Claims 26 to 60 were rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 4,025,301 to Lang (Lang) in view of U.S. Patent No. 4,588,410 to Konrad (Konrad). This rejection is respectfully traversed for at least the following reasons.

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## MOTIVATION TO COMBINE

The threshold for establishing a motivation to combine is set high. As explained by the Federal Circuit, “[o]ur case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). The Office can meet its burden of establishing a *prima facie* case of obviousness “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (internal citations omitted) (emphasis added). However, as was the case in *Fine*, “[t]his it has not done.” *Id.* at 1599.

### 1. Objective Teachings of Motivation are Absent

As set forth in Applicants’ Amendment of March 28, 2001, Applicants respectfully assert that the failure of Konrad and Lang to provide an objective teaching that would lead one skilled in the art to combine Konrad’s coupler in a composition comprising both an oxidation base and a direct dye, let alone the direct dye of Lang example 14, precludes the formation of a *prima facie* case of obviousness against the present invention.

The Office rejected these arguments on the grounds that “one cannot show nonobviousness by attacking reference individually where the rejections are based on combinations of references,” and cited *In re Merck & Co*, 208 USPQ 871 (CCPA 1981)

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and *In re Keller*, 231 USPQ 375 (Fed.Cir. 1986), in support of this position. Page 5, lines 8-12. Applicants respectfully disagree.

The Office relies on Konrad for providing the motivation for making the suggested modification of *Lang*. Specifically, the Office argues that:

It would have been obvious... to at least partially substitute the m-aminophenol coupler in the composition and process of *Lang*... because *Lang* does not require any specific oxidation dyes for use in the patentee's composition, and Konrad teaches that the claimed substituted m-aminophenols have various improvements over the conventionally used m-aminophenols.

Page 3, lines 15-20. In other words, the Office relies on Konrad for providing motivation to modify *Lang*, and simply notes that the suggested modification is not expressively excluded by *Lang*. Therefore, although the rejection as a whole is based on Konrad and *Lang*, the element of motivation is based on Konrad itself. Accordingly, for the Office to cite *Merk* and *Keller* and to suggest that the asserted motivation contained in Konrad cannot be attacked is contrary to the case law, and wholly unreasonable.

Nevertheless, Applicants respectfully assert that the Office has not shown and that Konrad and *Lang*, taken together, do not contain the requisite motivation for, as suggested by the Office, modifying *Lang* example q, by replacing the m-aminophenol with Konrad's substituted m-aminophenol. Applicants respectfully submit that the composition of *Lang* example q is a unique and complex composition, and that it is unreasonable to rely on the, at best, very generalized teaching of Konrad as motivation for modifying this specific composition.

Applicants also respectfully submit that the Office has thus far treated the composition of *Lang* example q as the mere static mixture of unrelated components that

would not be expected by one skilled in the art to interact. However, the composition must be considered as a whole, and understood to have a unique chemical identity that, due to the potential for chemical interactions and reactions, is more than merely the sum of its components. That is, a chemical composition is a distinct entity and can be contrasted with, for example, a physical mixture such as a mixture of ball bearings. Further, the failure to recognize the potential for interactions between chemical components is starkly inconsistent with the perspective of one skilled in the art.

By focusing on an abstract teaching of Konrad that does not address any of the specific motivation issues identified below, the Office has failed to treat the composition of Lang example q as a whole, or to even recognize that it is a chemical composition composed of a large number of components that have potentially hundreds of chemical interactions or reactions to consider. In short, the Office has failed to recognize that the composition containing base B and coupler C is a different composition than the composition containing base B, coupler C, and direct dye D.

Consequently, missing from the objective teaching of Konrad and Lang is the motivation to, among other things, (1) use Konrad's coupler in place of m-aminophenol in a composition comprising a direct dye, (2) use Konrad's coupler in place of m-aminophenol in a composition comprising the direct dye of Lang example 14, and (3) use Konrad's coupler in place of m-aminophenol in a composition comprising all fourteen of the chemical components of Lang example q.

More specifically, although Konrad might broadly suggest the possibility of compositions comprising mixtures of bases and couplers (col. 3, lines 39-43), and might also broadly suggest the possibility of adding certain additional cosmetic components

suitable for use with the coupler (col. 3, line 54 - col. 4, line 18), neither Konrad nor Lang provide any motivation for using Konrad's coupler in a composition comprising a direct dye, much less the specific class of direct dyes disclosed in Lang, much less the particular direct dye of Lang example 14. In fact, given that Konrad does not include direct dyes among the specifically identified compatible components, it is even more evident that Konrad does not provide an objective teaching directed towards the suggested combination.

Furthermore, and of equal importance, the references also lack any motivation for using Konrad's coupler in compositions comprising all the potentially interacting components of Lang example q.

Accordingly, since the cited references lack an objective teaching for the suggested combination/modification, a *prima facie* case of obviousness has not been established. Reconsideration and withdrawal of the rejection is respectfully requested.

2. Lang Teaches Away from the Suggested Modification

The motivation cited by the Office to support the suggested combination is that "Konrad teaches that the claimed substituted m-aminophenol have various improvements over the conventionally used m-aminophenols." Konrad does, in fact, identify certain weaknesses of m-aminophenols allegedly overcome by the substituted m-aminophenol. Specifically, that they generate weak color tone with p-aminophenols, and do not yield red tones with p-diamines. Col. 2, lines 32-36.

Lang teaches compositions that (1) provide stable and luminescent shades ranging from yellows to blues (col. 1, lines 61-62), (2) often have excellent stability (col. 3, lines

56-58), and (3), in the case of example q, yield “a particularly luminescent coppery golden blond color.” Col. 22, lines 42-43.

Accordingly, since Konrad teaches that the substituted coupler yields a stronger and/or redder tone, one skilled in the art would expect, if anything, these same effects on the compositions of Lang. However, since Lang is directed to compositions for blue-yellow tones, Lang would no longer be suitable for its intended purpose if Konrad’s coupler produced red tones. Thus, since Lang would no longer be suitable for its intended purpose, Applicants respectfully submit that Lang teaches away from the suggested modification.

Likewise, since the composition of Lang example q is already a highly favorable luminescent coppery golden blond, Lang also teaches away from a modification that would result in different strength tone that might no longer be the highly favorable luminescent coppery golden blond.

Accordingly, since Lang is directed to and successfully produces highly favorable colors ranging from yellow to blue, including the particularly luminescent coppery golden blond color of example q, Lang teaches away from the suggested modification. Reconsideration and withdrawal of the rejection is respectfully requested.

3. *Kerkhoven* is Not Applicable

The Office has also supported its rejection by arguing that “[i]t is prima facie obvious to combine two compositions each taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose.” Page 5, lines 15-17. However, the present case differs from the facts

of *In re Kerkoven*, 205 USPQ 1069 (CCPA 1980), cited by the Office to support of this argument.

Specifically, as characterized by the CCPA, the claims at issue in *Kerkoven* “require no more than the mixing together of two conventional spray-dried detergents.” *Kerkoven* at 1072. In contrast, the composition of Lang example q cited by the Office is not directed to static mixtures of components, such as those of *Kerkoven*, that have no necessary interaction with one another. In fact, as discussed above, the Lang composition is a complex reactive composition comprising components chosen from, among other things, bases, couplers, and direct dyes, which have specific chemical relationships.

Given that Lang example q is a complex chemical mixture, the modification suggested by the Office of the at least partial substitution of one of the reactive components, is in no way equivalent to the mere “mixing together” situation on which *Kerkhoven* is based. Accordingly, based on the factual differences between the present case and those presented in *Kerkhoven*, Applicants respectfully submit that the rejection relying on *Kerkhoven* is improper.

Moreover, Applicants respectfully submit that the more recent Federal Circuit holding in *In re Geiger*, 2 U.S.P.Q.2d 1276 (Fed. Cir. 1987), is applicable to the present situation. In *Geiger*, the Appellants claimed a method of inhibiting scale formation on and corrosion of metallic parts in cooling water systems by use of compositions containing (1) a copolymer of sulfonated styrene/maleic anhydride (SSMA); (2) a water soluble zinc compound; and (3) an organo-phosphorus acid compound or water soluble salt. The collective prior art taught using each of these three components, separately or

in a combination falling short of that claimed, for treating cooling water systems. The Board of Patent Appeals and Interferences held it *prima facie* obvious to combine the three components together for their known functions and to optimize the amount of each. *In re Geiger*, 2 U.S.P.Q.2d at 1277-78.

The Federal Circuit reversed the Board, emphasizing that "[o]bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination." *Id.* at 688, 2 U.S.P.Q.2d at 1278. The court then proceeded to go through each of the references relied on showing why, absent hindsight, the skilled artisan would not have found it obvious to make the claimed composition.

While acknowledging that combining the three components of the claimed composition may have been obvious to try, the court stated it does not constitute the standard for combining references under § 103. *Id.*; cf. *In re Wesslau*, 147 U.S.P.Q. at 393 (holding "[i]t is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art").

Thus, as in *Geiger*, even if components or compositions have known functions for the same purpose, the Office must nevertheless establish all the elements of a *prima facie* case including, among other things, some teaching, suggestion or incentive supporting the combination. However, Applicants respectfully assert that the Office's reliance on *Kerkhoven* to establish a *prima facie* case of obviousness, based on the argument that it is obvious to mix two compositions known for the same purpose, is

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misplaced given that an objective teaching, suggestion or incentive supporting the combination has not been established.

Therefore, since the Office has not established and the references do not contain sufficient objective teachings of a motivation to combine, a *prima facie* case of obviousness has not been established. Reconsideration and withdrawal of the rejection is respectfully requested.

### **EXPECTATION OF SUCCESS**

The Office has also failed to show that there would be a reasonable expectation of success for the suggested combination. Specifically, neither Konrad nor Lang (taken individually or in combination) provide any reasonable expectation of success for the Office's proposed replacement of Lang's m-aminophenol with Konrad's substituted m-aminophenol. Therefore, given that the references (taken individually or in combination) do not teach that Konrad's substituted m-aminophenol is functional as a coupler in a chemical composition comprising a direct dye, much less the direct dye of Lang example 14, much less all fourteen of the components of Lang example q, there is no objective teaching of a reasonable expectation of success.

Should the Office continue to maintain that the references provide a reasonable expectation of success for the suggested modification of Lang example q, Applicants respectfully request that the Office more clearly cite the evidence supporting an expectation of success for using Konrad's substituted m-aminophenol in a composition comprising a direct dye, and more specifically the direct dye of Lang example 14, and still more specifically all fourteen of the components of Lang example q.

Accordingly, for at least the reasons that there is no reasonable expectation of success, Applicants respectfully assert that a *prima facie* case of obviousness has not been established. Reconsideration and withdrawal of the rejection is respectfully solicited.

### III. Provisional Double Patenting Rejections

The provisional obviousness-type double patenting rejection of claims 26-60 over co-pending Application No. 09/424,119 in view of U.S. patent No. 4,976,742 to Rose (Rose) is noted. Applicants reiterate their traversal of this rejection as set forth in Applicants' Amendment of March 28, 2001.

Specifically, given the absence of any teaching in either co-pending Application No. 09/424,119 or Rose (taken individually and together) that the claimed combination of all of (a) at least one oxidation base, (b) as a direct dye, at least one 3-aminopyridine derivative chosen from the compounds of formula (I), and (c) at least one coupler chosen from a meta-aminophenol derivative of formula (II) would be expected to yield a composition suitable for the oxidation dyeing of keratin fibers, it is respectfully asserted that the references do not contain and have not been cited for any reasonable expectation of success for the claimed composition.

The Office has rejected Applicants' previous remarks on the grounds that "one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references." Office Action, page 7, lines 15-17.

However, as discussed previously, this argument is not applicable to the current facts and, moreover, it is not responsive to what Applicants have argued. Specifically,

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Applicants have argued that the cited references, even when taken together, provide no expectation of success for the specific combination suggested by the Office. The Office has not responded to this argument, and has also never cited any evidence that the cited reference combination provides the required reasonable expectation of success.

The Office also responded to Applicants' previous remarks by stating that "Rose provides the motivation to choose the particular claimed coupler..." Office Action, page 8, line 1. However, while Applicants respectfully disagree with this conclusion, it is further noted that this statement is non-responsive to Applicants' arguments that the cited reference have not been cited for and do not contain the required reasonable expectation of success.

Accordingly, for at least the reasons that there is no reasonable expectation of success, Applicants respectfully assert that a *prima facie* case of obviousness has not been established. Reconsideration and withdrawal of the rejection is respectfully solicited.



**CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

A handwritten signature in black ink, appearing to read "Mark J. Feldstein".

By: \_\_\_\_\_

Mark J. Feldstein  
Reg. No. 46,693

Dated: August 1, 2001

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